DOCUMENT RESUME

ED 227 947 PS 013 428

AUTHOR Sawyer, Walter E.; Sawyer, Jean
TITLE Public Versus Private Schooling: Are Student Differences a Cause or Effect?
PUB DATE Dec 82
NOTE 20p.; Paper presented at the Annual Meeting of the Eastern Regional Conference of the International Reading Association (4th, Boston, MA, December 2-5, 1982).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Classification; Comparative Analysis; Educational Vouchers; *Kindergarten Children; Learning Readiness; *Memory; *Parent Participation; Private Schools; *Psychomotor Skills; Public Schools; *Receptive Language; Tax Credits

ABSTRACT

In 1981, James Coleman reported results of a study indicating that private schools were superior to public schools. He claimed that supporting private schools through tax credits or vouchers was in the interest of society. To explore the possibility that differences attributed to schools might be due to differences in student skills, motivation, and parental support, a study investigated the background children bring to public and private kindergarten classrooms. The sample consisted of 90 children entering kindergarten. Variables considered included verbal and numerical memory, fine and gross motor skills, basic concepts, a composite of these five abilities, and receptive language. Six months prior to assessment, all subjects and their families were given the opportunity to participate in a parent-administered skills program. Results indicated that at the kindergarten level, private school students possessed readiness skills superior to those of public school students in the areas of verbal and numerical memory and receptive language. Further, parents of private school students involved themselves in their children's education significantly more than did the parents of public school children. It was concluded that Coleman's claim of private school superiority may not be valid and that, if invalid, support for tax credits or vouchers may be irrelevant. (RH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

PUBLIC VERSUS PRIVATE SCHOOLING: ARE STUDENT DIFFERENCES A CAUSE OR EFFECT?

ED227947

Walter E. Sawyer, Ed.D. - Waterford-Halfmoon UFSD
Waterford, N.Y. 12188

Jean Sawyer - Reading Department
State University of New York
Albany, N.Y. 12222

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Walter E. Sawyer

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

PS013428

Paper presented at the Fourth Eastern Regional Conference of the International Reading Association, Boston, Massachusetts, 1982

The purpose of this study was to investigate the skills of public and private-bound preschoolers in the context of, and in relation to, recent criticism of public high schools. In the spring of 1981, a multitude of news stories reported on the results of James Coleman's latest major study (Coleman, et al, 1981). The results were controversial and unsettling to those in the nation's public high schools. The study's major conclusions contended that private schools were superior to public schools in a variety of ways and that it would be in society's best interest to support them through such devices as tuition tax credits.

Page and Keith (1981) were among the first to challenge Coleman's findings. They claimed that student and family input was largely responsible for the achievement of private secondary school students. They also noted that measures of student ability prior to entering the private secondary school would be useful but that none exists in the data set. One cannot return in time to obtain those measures, but it is possible to obtain such measures from students prior to their entering public and private schools.

Rather than observe input variables of students about to enter secondary schools for the first time, would it not be more revealing to obtain measures of student ability prior to entering school at all? The readiness characteristics a child brings into kindergarten is related to the success that a child will have in learning to read (Richek, 1978; Sawyer & Sawyer, 1980, 1982). Few would argue with the belief that a strong reading ability has a powerful effect on subsequent learning in a variety of curricular areas. This is directly related to a question raised by one of Coleman's critics who asked whether the differences in public and private schol students' achievement resulted from differences in the quality of education or differences in student skills, motivation and parental support (Murname, 1981). Therefore, rather than examining student and family characteristics a student brings to the secondary school, this study seeks to determine the background children bring to the public and private kindergarten classroom.

Review of the Literature

The data used by Coleman originally came from a 1980 longitudinal study titled High School and Beyond (HSB) (1980). That study was designed as a general purpose survey. The central prupose was to describe public, private-Catholic, and other private secondary schools. The schools were selected for the study in such a way as to include various types of secondary schools. They were not selected in such a way that they would necessarily be proportionately representative of the nations secondary schools. The decision to use HSB data to compare public and private schools was made after the survey was conducted (Bryk, 1981). The sample included 58,728 students in 1016 secondary schools.

Public and Private Schools (PPS) (Coleman, et al., 1981) was one of five papers commissioned by the National Center for Educational Statistics using the HSB data set. The first major conclusion of PPS is that private schools produce better cognitive outcomes than public schools when background factors that predict achievement are controlled. A caveat, not noted by the news media, was included; it admitted that there could be other unmeasured factors associated with self-selection into the private sector which are associated with higher academic acheivement. A second major conclusion was that private schools do not increase racial or social class segregation in secondary schools. Finally, PPS concluded that government financial aid to private schools, in the form of tuition tax credits for example, would benefit the needy and minorities and would not increase school segregation.

Also contained in HSB were several additional findings. While they did not receive the same emphasis as the PPS conclusions, their existence raises serious questions concerning the PPS conclusions. Among these findings are: a.) Catholic high schools are concentrated in suburban areas rather than urban areas as is commonly believed; b.) The number of blacks in Catholic high schools is only half that of the black population in public high schools; c.) The number of blacks in non-Catholic private high schools is only one quarter that of the black population in public high schools; d.) Private high schools enjoy higher daily attendance rates, fewer discipline problems and higher achievement; and e.) Private

high schools offer primarily academic programs. Academic programs enrolled 70% of the private school students but only 34% of the public school students.

The criticism of PPS has mainly focused on two areas: the validity of the statistical techniques used and the appropriateness of drawing inferences from descriptive data. While the matter of racial and SES segregation is of utmost societal importance, this discussion will confine its scope to the area of pupil achievement.

As noted earlier, Bryk (1981) contends that the survey data used by PPS are adequate for enumerative purposes but not for establishing causality. An experimental framework, within which one manipulates variables, is the only acceptable device for determining the effects of public school students shifting to private schools. Finally, Bryk demonstrates that the PPS use of regression techniques is likely to produce an under estimation of effect, the magnitude of which is undeterminable.

Since the HSB data revealed vastly different proportions of public and private students pursuing an academic curriculum, Peng and Fetters (1981) reanalyzed the data to include only those students in the academic curriculum. In so doing, they found no significant differences in student achievement between the public and private school groups.

Page and Keith (1981), focusing upon Coleman's caveat concerning other unmeasured variables which are possibly related to school achievement, reanalyzed the original data. Using path models, they investigated some of these other unmeasured variables. They demonstrated that the home's greatest influence on achievement is transmitted through ability. Using multiple regression techniques, they found that the private school effect is less than one half of one percent of the variance in achievement when verbal and certain non verbal abilities are included in the analysis.

The history of movement of school teacher mobility is that of leaving schools with large numbers of discipline problems and unmotivated children. A school devoid of these problems is more likely to attract and retain talented teachers (Becker, 1952; Greenberg, 1974). One of the most effective ways to improve children's cognitive abilities is to place them in an environment with children who want to improve their cognitive skills and whose

families support such learning (Hanushek, 1972). Thus is laid the rationale for why students and their families self select into private schools. The issue which is mentioned most frequently by PPS critics is that of the self-selection of private school students. Many critics contend that the self selection process cannot be adequately controlled by the 17 subjective and objective family background characteristics used by PPS (Barrow, et al., 1980; Braddock, 1981; and, Murname, 1981). While Braddock cites the law requiring public schools to accept all students, a major part of the problem, Murname approaches it from a pedagogical and design standpoint. He contends that student selection cannot be separated from the educational process because; a,) the right mix of students can improve the effectiveness of an educational program, b.) the right to dismiss disruptive students can reduce negative impacts on the program, and c.) these two in combination can be attractive to talented teachers. Finally Murname contends that the elimination of the self-selection bias requires the identification and measurement of at least one variable which influences a family's choice of school but which does not influence a child's acheivement.

There are those, too, who accept the achievement conclusions of PPS as stated (Finn, 1981; and Guthrie & Zusman, 1981). However, even they stop short of embracing government aid to private schools. Instead, they contend that the report should focus public attention on improving such things in the public schools as learning environment, a sense of mission, and strategies for dealing with legal constraints.

The lack of data concerning incoming student ability levels was primarily due to the fact that HSB was a survey rather than an experimental study. Nevertheless, even if such data were available, it too could have questions raised concerning its usefulness. It is generally known that public secondary schools draw their students heavily from public elementary schools. So too do private secondary schools recruit a large percentage of their students from private elementary schools. If certain critics (Braddock, 1981; Bryk, 1981; and Page & Keith, 1981) of PPS are correct in suggesting that background variables were inadequately controlled, data obtained from students after eight or nine years of public

or private schooling prior to entering high school would only force the issue downward in terms of levels of schooling compared.

It may be that the only background variables which are untainted by schooling are those which are measured prior to a child's formal enrollment in kindergarten or elementary school. This is true for both cognitive and affective variables. While cognitive skills measured in preschoolers are constantly changing, they are often found to be strongly related to reading (Sawyer & Sawyer, 1980) and also amenable to change through the intervention of their families (Sawyer & Sawyer, 1982).

The first study (Sawyer & Sawyer, 1980) investigated the relationships between kindergarters' readiness skills and their reading readiness skills. Using a sample of 42 preschoolers to obtain data from a preschool experience survey and the Metropolitan Readiness Test, (Nurss & McGauvran, 1974) two conclusions were drawn: a.) increasing preschool experience with stories and diverse cultural experiences enhances the readiness factors needed for most reading programs; and, b.) increasing preschool time viewing educational television was negatively related to reading readiness factors in general and those associated with phonetically based reading programs in particular.

The second study (Sawyer & Sawyer, 1982) examined seven readiness skill areas in order to determine the effects of four preschool experiences: a nursery school program, a parent administered skills program, a combination of these two, and neither program. While it was concluded that a cooperative home/school program was superior in developing readiness skills, it was also concluded that preschoolers' basic concepts can be significantly increased solely through parental and family efforts.

Other studies also support the findings and conclusions of these two studies. Bronfenbrenner (1974) concluded, in a governmental report, that home-based instruction was meaningful to both the parent and the child. Durkin (1961) concluded that the preschool parent/child verbal interaction is a powerful influence in regard to early reading. Lomax (1977) found a strong relationship between preschoolers' experience with books in the home

and their later interest in reading. White and Watts (1973) concluded that preschool cultural experiences are significantly related to language development and later reading achievement. Also, the obvious instructional potential of parents and their preschool children was demonstrated in several studies on attachment behavior (Farron & Romey, 1979; and Ragozin, 1980).

Therefore, given the criticism of PPS controls for background input variables and the dubious value of assessing these at the pre-high school level, it appears that the pre-school level is the appropriate measurement point. To observe the secondary school effects, however, would take close to two decades of time. In view of the fact that large numbers of students tend to remain solely in either a public or a private school for the duration of their compulsory schooling, one may draw conclusions following the point at which families enroll their preschoolers in public or private schools. That is, until enrollment occurs, the investigators would not know whether a child is public or private-bound. At that point, the total group of subjects would form two groups for comparison of preschool skills. By including a voluntary parent-administered skills program, a measure of family education attitude could be obtained and analyzed.

Method

The sample for the study consisted of 90 preschoolers who comprised the incoming kindergarten classes in a small village New York State school district. Data were collected at a spring screening which had a 96% participation rate. Variables measured included verbal memory, fine motor skills (draw-a-design), numerical memory, basic concepts (conceptual grouping), gross motor skills (leg coordination), a composite of these five, and receptive language. The first six skills were measured using the McCarthy Scales of Children's Abilities (McCarthy, 1972), while receptive language was measured with the Test of Auditory Comprehension of Language (Carrow, 1973).

Six months prior to the screening all of the children and their families were given the opportunity to take part in a parent administered skills program. All families were notified by mail and personal telephone call using census data. The skills program focused

on the areas of language development, number skills, basic concepts, motor skills, social development and opportunities for free play with other children. Children who participated were administered the same battery of instruments used at the spring kindergarten screening. Besides a pre/post evaluation of participants, the program consisted of an activities booklet, a kit of related materials and a half day training session for parents. The program is described in greater detail elsewhere (Sawyer, Cavosie, Virga, & Ward; 1981; and Sawyer & Sawyer, 1982).

A total of 63 children enrolled in the public school, 25 of whom participated in the voluntary program. A total of 27 children enrolled in the non-public school, 13 of whom participated in the voluntary program. Individual pupil data were analyzed by analysis of variance (ANOVA) and Scheffé tests. Public and private-bound students' participation in the voluntary program was analyzed by Chi-Square, using expectancy rates generated through total group data.

Results

The first data collection point occurred for only a portion of the total group. This group consisted only of those children whose families sought participation in the voluntary parent administered skills program. Table 1 summarizes the results of this data. At this point there was a significant difference ($F=5.95$, $p < .05$) between the public and private school bound children in the verbal memory skills in favor of the latter group.

Table 1 here

The second data collection took place in the spring, six months after the initial data collection point. The participation rate for those students who enrolled in the public and private school was 96%. At this point, significant differences were found in favor of private school bound children in verbal memory ($F=18, 24$, $p < .0001$), numerical memory ($F=5.49$, $p < .02$), leg coordination ($F=6.40$, $p < .01$), and the composite ($F=10.55$, $p < .002$).

Table 2 here

Table 3 summarizes the means and standard deviations for seven skills by public and private school bound groups. Within the public and private subgroups, the data are divided by whether or not the students participated in the parent administered program.

Table 3 here

Table 4 summarizes data in a manner similar to that of Table 3 except that the most finite groups are based on whether or not the subjects attended a nursery school for a period of at least one school year.

Table 4 here

Table 5 summarizes ANOVA and Scheffé F-values for comparisons of public and private bound students by nursery school attendance and parent program participation for those skills identified as containing significant differences in Table 2, with two exceptions. Leg coordination was deleted from this analysis since it was not seen as having great importance to cognitive skill development other than as a screening tool. Receptive language was included since it was seen as having great importance for school learning. At this point, the private school bound group was found to be superior to the public school bound group in verbal memory skills in all comparisons. Although not as consistent in all comparisons, similar findings were observed in numerical memory, the composite and receptive language. Whenever a significant difference occurred, it was in favor of the private school bound group.

Table 5 here

Table 6 summarizes the participation rate of families in the voluntary program.

Table 6 here

A significantly different pattern of participation was found between public and private school bound children ($X^2 = 10.51$, $P < .025$). The public school group had a lower than expected participation rate and the private school group had a greater than expected participation rate.

Discussion

In view of the significant results of the analysis which were consistently in favor of the private school bound preschoolers, several conclusions can be drawn. While each has importance in and of itself, it is their combination which has particular importance to PPS and social policy formulation.

Private school students possess readiness skills superior to those of public school students at the preschool level. These readiness skills include verbal memory, numerical memory and receptive language, skills which are related to success in early schooling. While these are skills which are often seen as being within the realm of general ability, they are amenable to change through parental efforts (Sawyer & Sawyer, 1982). It is therefore conceivable that the difference is a product of home background rather than an inate ability.

The parents of private school students involve themselves in their children's education significantly more than the parents of public school children. It was not de-

termined whether this difference was a product of ability, interest, or motivation on the part of the parents. Whatever the reason, the fact remains that parents of private school students become more involved in their children's education, they do so at a very early point, and the effects are beneficial to the education of the children.

The implications of these conclusions bear directly on the conclusions of PPS. First, PPS could not control adequately for the student input and family influence found to exist at the preschool level. It is therefore contended that the PPS claim of private school education superiority may not be valid. A related conclusion supporting public funding for private schools is also brought under question. If PPS claims for private school superiority are not valid, its support for tax credits or vouchers is not relevant.

However, even if PPS conclusions are accepted by public policymakers, the results may be disappointing. One must consider several possibilities. Would private schools tend to accept only children comparable to those already enrolled? Would private schools increase their capacity in order to accept all those who might wish to enroll? If private schools responded affirmatively to each of these questions, the expected effect still might not occur. Those students who least need the actual benefits a private school can offer may constitute the majority of the group moving into the private sector.

Given the fact that PPS is at best a descriptive summary of public and private school data, it cannot validly be used as an instrument to shape public policy. If it were such an instrument, it could just as easily be used as an argument for the federal government to increase the flow of funds to public school programs aimed at remediating academic deficiencies, increasing pupil motivation and encouraging parental participation in the educative process. Perhaps that would be the most beneficial thing to come from PPS. The public policy issue should not focus on encouraging students to enter the private sector for their education; rather, it should search for ways to make public education more viable and attractive. Public education has served this society well for generations. Now is not the time to desert it.

REFERENCES

Barnow, B.S., Canin, G.G., & Goldberger, A.S. Issues in the analysis of selectivity bias. In E. Stromsdorfer & G. Farkas (Eds.), Evaluation Studies Review Annual (Vol. 5). Beverly Hills, Calif: Sage, 1980.

Becker, H., The career of the Chicago public school teacher. American Journal of Sociology, 1952, 57, 470-477.

Braddock, J.H. The issue is still equality of educational opportunity. Harvard Educational Review, 1981, 51, 490-496.

Bronfenbrenner, U. A report on longitudinal evaluations of preschool programs. Is early intervention effective? (Vol. 2). Washington, D.C.: U.S. Department of Health, Education & Welfare, 1974

Bryk, A.S. Disciplined inquiry or policy argument? Harvard Educational Review, 1981, 51, 497-509.

Carrow, E. Test for Auditory Comprehension of Language. Hingham, Mass: Teaching Resources, 1973.

Coleman, J., Hoffer, T., & Kilgore, S. Public and Private Schools. Chicago: National Opinion Research Center, 1980.

Durkin, D. Children who read before grade one. The Reading Teacher, 1961, 14, 163-166.

Farron, D.C. & Romey, C.T. Infant daycare and attachment behaviors towards mothers and teachers. Child Development, 1979, 48, 1112-1116.

Finn, C.E. Why public and private schools matter. Harvard Educational Review, 1981, 51, 510-514.

Greenberg, D. & McCall, J. Teacher mobility and allocation. Journal of Human Resources, 1974, 9, 480-502.

Guthrie, J. W. & Zusman, A. Unasked Questions. Harvard Educational Review, 1981, 51, 515-518.

Hanushek, E. Education and Race. Lexington, Mass.: D.C. Heath, 1972.

High School and Beyond. Chicago: National Opinion Research Center, 1980.

Lomax, C.M. Interest in books and stories at nursery school. Educational Research, 1977, 19, 100-112.

McCarthy, D. McCarthy Scales of Children's Abilities. N.Y.: Psychological Corp., 1972.

Murname, R. Evidence, analysis and unanswered questions. Harvard Educational Review, 1981, 51, 483-489.

Nurss, J. R. & McGawran, M.E. Metropolitan Readiness Test. N.Y.: Psychological Corp., 1974.

Page, E.B. & Keith, T.Z. Effects of U.S. private schools: a technical analysis of two recent claims. Educational Researcher, 1981, 10, 7, 7-17.

Peng, S. & Fetters, W. Memoranda sent to J. Coleman and S. Kilgore of the National Opeinion Research Center, April 1, 1981.

Ragozin, A.S. Attachment behavior of daycare children: Naturalistic and laboratory observations. Child Development, 1980, 51, 409-415.

Richek, M.A. Readiness skills that predict word learning using two different methods of instruction. Reading Research Quarterly, 1978, 13, 200-222.

Sawyer, W.E., Cavosie, A., Virga, D., & Ward, M.E. Getting to know you: a parent administered preschool program. Journal of the School Administrators Association of New York State, 1981, 12, 2, 6-9.

Sawyer, W.E. & Sawyer, J.C. Preschool experiences and reading readiness skills: Predicting the most efficient reading instruction. Educational Researcher, 1980, 9, 5, 10.

Sawyer, W.E. & Sawyer, J.C. An assessment of preschool education options for rural and small village areas. Research in rural education, 1982, 1, in press.

White, J.C. & Watts, J.C. Experience and environment: Major influences on the development of the young child (Vol. 1), Englewood Cliffs, N.J.: Prentice-Hall, 1973.

Table 1

Summary of means, standard deviations, and analyses of variance F - values for public school bound and nonpublic school bound four year-olds in seven skill areas

Skill Area	Public School Bound		Nonpublic School Bound		F
	$\bar{X}$	S.D.	$\bar{X}$	S.D.	
Verbal memory	16.00	7.93	21.85	4.67	5.94 *
Draw-a-design	4.80	2.18	3.69	1.89	2.41 N.S.
Numerical memory	5.80	2.24	6.62	1.61	1.35 N.S.
Conceptual grouping	6.76	2.63	6.15	2.12	.51 N.S.
Leg coordination	8.68	2.46	9.69	2.59	1.40 N.S.
Composite	42.08	12.94	48.00	9.38	2.12 N.S.
Receptive language	66.24	14.43	67.23	14.25	.04 N.S.
	(N = 25)		(N = 13)		

* $p < .05$

Table 2

Summary of means, standard deviations, and analyses of variance F - values for public school bound and nonpublic school bound five year olds in seven skill areas

Skill Area	Public School Bound		Nonpublic School Bound		F
	$\bar{X}$	S.D.	$\bar{X}$	S.D.	
Verbal memory	20.87	5.48	25.67	3.00	18.24 ****
Draw-a-design	6.29	2.45	6.00	2.79	.24 N.S.
Numerical memory	7.37	2.89	8.89	2.67	5.49 **
Conceptual grouping	8.02	2.77	8.00	1.86	.001 N.S.
Leg coordination	9.22	1.70	10.19	1.55	6.40 *
Composite	51.76	10.09	58.63	6.58	10.55 ***
Receptive language	75.48	12.83	79.89	8.46	2.68 N.S.
	(N = 63)		(N = 27)		

* $p < .01$
** $p < .02$
*** $p < .002$
**** $p < .0001$

Table 3

Summary of means and standard deviations for public school bound and nonpublic school bound five year-olds in seven skill areas by home-based program participation

Skill area	Public school bound		Nonpublic school bound	
	Participant in home-based program	Non-participant in home-based program	Participant in home-based program	Non-participant in home-based program
Verbal memory	21.00 (4.92)	20.79 (5.88)	26.38 (1.94)	25.00 (3.68)
Draw-a-design	6.56 (2.79)	6.11 (2.22)	5.38 (3.28)	6.57 (2.21)
Numerical memory	8.20 (3.61)	6.82 (2.19)	8.85 (2.64)	8.93 (2.79)
Conceptual grouping	9.36 (1.63)	7.26 (2.63)	8.00 (1.58)	8.00 (2.15)
Leg coordination	9.36 (1.63)	9.13 (1.76)	9.85 (1.63)	10.50 (1.45)
Composite	54.28 (10.25)	50.11 (9.76)	58.46 (5.25)	58.79 (7.81)
Receptive language	79.08 (9.70)	73.11 (14.15)	77.46 (9.73)	82.14 (6.68)
	(N = 25)	(N = 38)	(N = 13)	(N = 14)

Table 4

Summary of means and standard deviations for public school bound and nonpublic school bound five year-olds in seven skill areas by nursery school attendance

Skill area	Public school bound		Nonpublic school bound	
	Attended nursery school	Did not attend nursery school	Attended nursery school	Did not attend nursery school
Verbal memory	21.74 (4.91)	19.56 (6.12)	25.93 (3.87)	25.38 (1.76)
Draw-a-design	6.53 (2.46)	5.92 (2.43)	7.21 (2.99)	4.70 (1.88)
Numerical memory	8.00 (3.22)	6.40 (2.00)	9.79 (2.99)	7.92 (1.93)
Conceptual grouping	8.53 (2.66)	7.24 (2.80)	8.21 (1.85	7.77 (1.92)
Leg coordination	9.00 (2.28)	9.16 (1.43)	10.36 (1.91)	10.00 (1.08)
Composite	54.05 (9.56)	48.25 (10.05)	61.50 (7.37)	55.54 (3.86)
Receptive language	78.18 (9.25)	71.36 (16.24)	82.50 (8.95	77.08 (7.20)
	(N = 38)	(N = 25)	(N = 14)	(N = 13)

Table 5

Summary of ANOVA and Scheffe F-values for public and nonpublic bound children in four significant skill areas by preschool program enrollments

Source	Skill Areas			
	Verbal Memory	Numerical Memory	Composite	Receptive Language
Nonpublic bound children in home based program versus:				
Public bound in home program	9.97 **	.38 NS	1.75 NS	.16 NS
Public bound not in home program	11.74 **	2.35 NS	7.60 **	1.29 NS
Public bound total group	6.25 **	1.39 NS	2.69 NS	.10 NS
Nonpublic bound children not in home based program versus:				
Public bound in home program	6.01 **	.62 NS	2.22 NS	.64 NS
Public bound not in home program	7.32 **	5.67 **	9.03 **	6.16 **
Public bound total group	3.85 *	1.72 NS	3.29 *	1.68 NS
Nonpublic bound children in nursery program versus:				
Public bound in nursery program	7.47 **	4.29 **	7.13 **	1.44 NS
Public bound not in nursery program	15.69 **	14.00 **	20.41 **	8.69 **
Public bound total group	6.05 **	4.36 **	6.77 **	2.11 NS
Nonpublic bound children not in nursery program versus:				
Public bound in nursery program	5.12 **	.01 NS	.26 NS	.08 NS
Public bound not in nursery program	12.01 **	2.58 NS	5.64 **	2.10 NS
Public bound total group	4.32 **	.20 NS	.92 NS	.10 NS

* $p < .05$
** $p < .01$

Table 6

Chi-square finding and summary of actual/expected participation in parent-administered skills program

Group	actual/expected participation in parent program		χ^2
	Yes	No	
Public school bound	25/36	38/27	10.51*
Private school bound	13/9	14/18	

$p < .025$